AMENDMENTS TO THE CLAIMS

A detailed listing of all claims that are, or were, in the present application, irrespective of whether the claim(s) remains under examination in the application are presented below. The claims are presented in ascending order and each includes one status identifier. Those claims not cancelled or withdrawn but amended by the current amendment utilize the following notations for amendment: 1. deleted matter is shown by strikethrough for six or more characters and double brackets for five or less characters; and 2. added matter is shown by underlining.

1. (Currently Amended) A self-calibrating radio frequency transmitter wherein said transmitter is powered by an AC power line and wherein said AC power line presents a line frequency, comprising:

an adjustable oscillator wherein said oscillator oscillates at an oscillator frequency, and has a desired operating frequency;

a first frequency counter, wherein said first frequency counter counts said oscillator frequency;

a second frequency counter, wherein said second frequency counters counts said line frequency of said AC power line; and

a comparer, wherein said comparer compares the counted oscillator frequency against the counted line frequency and produces an output representative of the difference between said counted oscillator frequency and said counted line frequency, wherein said difference indicates a deviation in said oscillator frequency from said desired operating frequency, and wherein said output is input to said adjustable oscillator to adjust said oscillator frequency back to said desired operating frequency.

2. (Original) The transmitter of claim 1, wherein said comparer comprises a microprocessor.

3. (Original) The transmitter of claim 1, wherein said difference indicates a deviation of said oscillator frequency from said desired operating frequency of greater than 0.5 parts per million.

4. (Original) The transmitter of claim 1, further comprising a frequency divider, wherein said frequency divider divides down said oscillator frequency.

5. (Original) The transmitter of claim 1, further comprising a digital to analog converter, wherein said output is a digital output and wherein said digital to analog converter converts said digital output to an analog output suitable for input to said adjustable oscillator.

6. (Original) The transmitter of claim 1, wherein said first frequency counter and said second frequency counter are simultaneously restarted on a pre-defined periodic basis.

7. (Currently Amended) A method for self-calibration of a radio frequency transmitter wherein said transmitter includes an oscillator having both an oscillator frequency and a desired operating frequency, and wherein said transmitter is powered by an AC power line and wherein said AC power line presents a line frequency, the method comprising the steps of:

counting said oscillator frequency;

counting said line frequency of said AC power line;

comparing the counted oscillator frequency to the counted line frequency to produce a difference in frequency, wherein said difference in frequency indicates a deviation of said oscillator frequency from said desired operating frequency; and

adjusting said oscillator frequency back to said desired operating frequency according to said difference in frequency.

8. (Original) The method of claim 7, wherein the step of comparing is performed by a microprocessor.

9. (Original) The method of claim 7, wherein said difference in frequency comprises a deviation of said oscillator frequency from said desired operating frequency of greater than 0.5 parts per million.

10. (Original) The method of claim 7, further comprising the step of dividing said oscillator frequency to a level suitable for counting.

11. (Original) The method of claim 7, further comprising the step of converting said difference in frequency to a signal suitable for input to said oscillator.

12. (Original) The method of claim 7, wherein said step of counting said oscillator frequency and said step of counting said line frequency are simultaneously restarted on a predefined periodic basis.

13. (Currently Amended) A self-calibrating radio frequency transmitter wherein said transmitter includes an oscillator having both an oscillator frequency and a desired operating frequency, and wherein said transmitter is powered by an AC power line and wherein said AC power line presents a line frequency, comprising:

means for counting said oscillator frequency;

means for counting said line frequency from said AC power line;

means for comparing the counted oscillator frequency to the counted line frequency to produce a difference in frequency, wherein said difference in frequency indicates a deviation of said oscillator frequency from said desired operating frequency; and

means for adjusting said oscillator frequency back to said desired operating frequency according to said difference in frequency.

14. (Original) The transmitter of claim 13, wherein said means for comparing comprises a microprocessor.

15. (Original) The transmitter of claim 13, wherein said difference in frequency comprises a deviation of said oscillator frequency from said desired operating frequency of greater than 0.5 parts per million.

16. (Original) The transmitter of claim 13, further comprising means for dividing said oscillator frequency to a level suitable for counting.

17. (Original) The transmitter of claim 13, further comprising means for converting said difference in frequency to a signal suitable for input to said oscillator.

18. (Original) The transmitter of claim 13, wherein said means for counting said oscillator frequency and said means for counting said line frequency are simultaneously restarted on a periodic basis.